

## ABSTRACT

Data drives and methods of operating a data drive are described. The drive includes: a drive base; a receiver for receiving a storage media device, the receiver being movably coupled to the drive base and translatable from an unloaded position to a loaded position; a media flag movably coupled to the receiver and translatable from a first position to a second position when the storage media device is inserted into the receiver; a media flag sensor fixedly coupled to the drive base for detecting movement of the receiver flag; a receiver flag fixedly coupled to the receiver; and a receiver flag sensor fixedly coupled to the drive base for detecting movement of the receiver flag. The method includes: receiving a storage media device into a receiver such that the storage media device contacts a media flag movably coupled to the receiver; detecting movement of the media flag using a media flag sensor; actuating movement of the receiver from an unloaded position to a loaded position; and detecting movement of a receiver flag fixedly coupled to the receiver using a receiver flag sensor.